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Docket No.: 09626/100L207-US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Tetsuya Atsumi et al.

Application No.: 09/473,495

Filed: December 28, 1999

For: LIGHT-WEIGHT SHAFT FOR GOLF CLUBS

Customer No.: 07278

Art Unit: 1733

Examiner: J. R. Fischer

DECLARATION BY INVENTOR TETSUYA ATSUMI UNDER 37 C.F.R. 1.132

MS Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, Tetsuya Atsumi hereby declare:

1. I am a citizen of Japan and I am over 21 years of age.
2. I am a named joint inventor of the above-captioned patent application and submit this declaration in support of the patentability of pending claims 20-22.
3. I tested golf club shafts manufactured by forming a first reinforcement layer from a first fiber material; forming a first angled layer by bonding second and third fiber materials; forming a first straight layer from a fourth fiber material; forming a second angled layer

Application No.: 09/473,495

4

Docket No.: 09626/100L207-US1

6. I further declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true. I further declare that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States code, and that such willful false statements may jeopardize the validity of the instant application or of any patent issued thereupon.

Respectfully submitted,

Date: Jan. 21, 2004

Tetsuya Atsumi
Tetsuya Atsumi

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TABLE 1

Shaft Weight [g]	Stack Angle for Second Angled Layer	Torsion Angle lb - ft [°]	Crushing Strength [kgf/10 mm]				Torsion Strength [kgf.m .°]	Three Point Bending [kgf]		
			a Butt to 10 mm	b Butt to 100 mm	c Butt to 200 mm	d Butt to 300 mm		A Tip to 175 mm	B Tip to 525 mm	C Butt to 175 mm
A	±20°	5.5	5.8	6.0	5.6	6.1	156.9	62.7	40.7	39.3
B	±45°	5.2	8.5	8.4	8.5	7.8	147.5	60.7	48.3	43.3
C	±60°	5.4	8.8	9.2	9.5	9.6	179.3	62.3	49.7	46.3
D	±70°	5.5	11.7	11.4	11.8	10.6	171.4	60.7	51.7	51.7
E	±75°	5.7	12.2	10.9	10.3	12.1	156.6	64.7	52.3	50.3
F	±80°	5.8	10.6	11.6	11.4	11.8	159.4	62.3	51.3	54.0